

FIG. 1

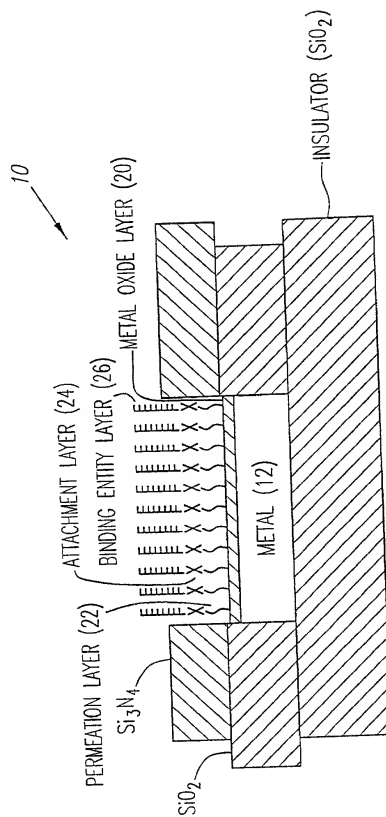


FIG. 2

2/8

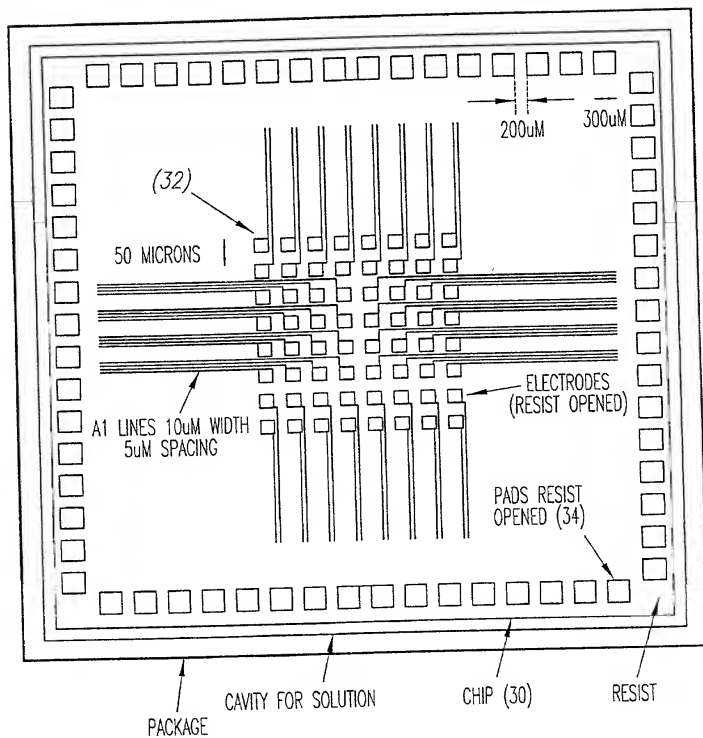


FIG. 3

3/8

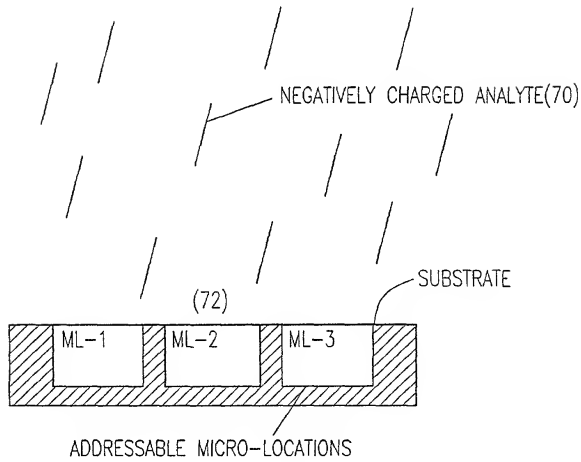


FIG. 4A

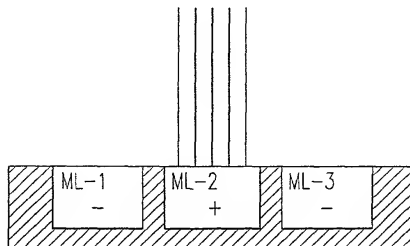


FIG. 4B

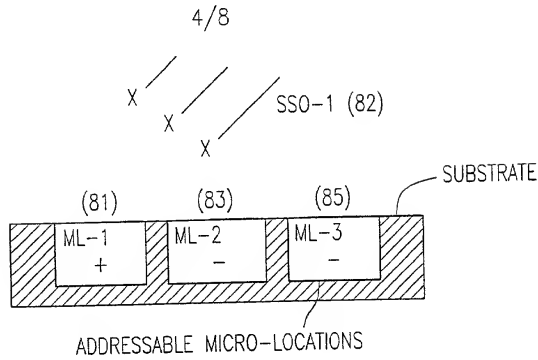


FIG. 5A

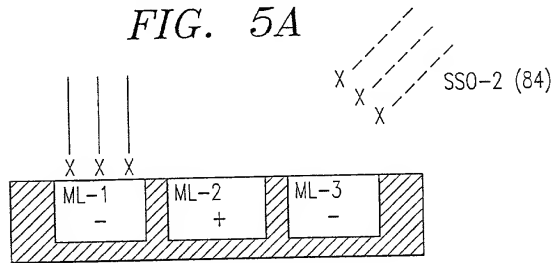


FIG. 5B

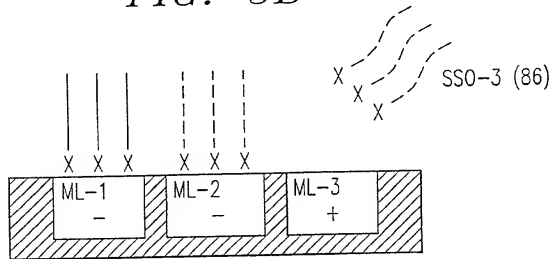


FIG. 5C

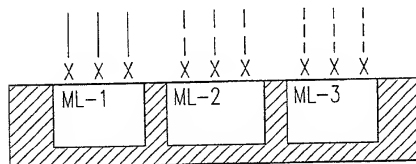


FIG. 5D

5/8

SOL-GEL PERMEATION LAYER WITH AGAROSE

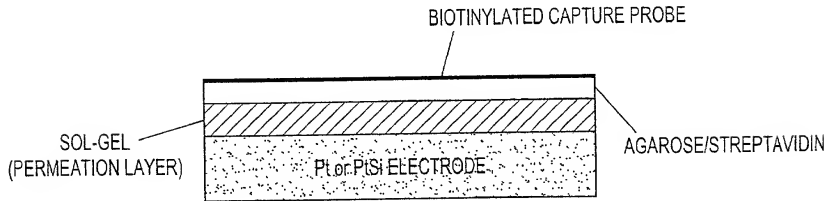


FIG. 6

SOL-GEL PERMEATION LAYER WITH COVALENT ATTACHMENT OF CAPTURE PROBE

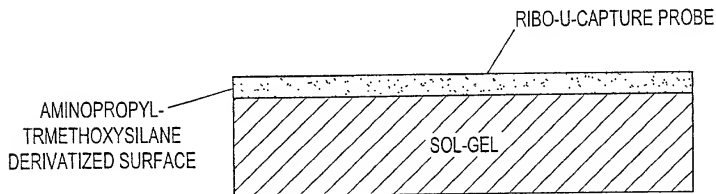


FIG. 9

Thin agarose/streptavidin on thick sol-gel
Capture Load with 20 nM biotin-T12-BTR
Sol-Gel sample a242e_02_04

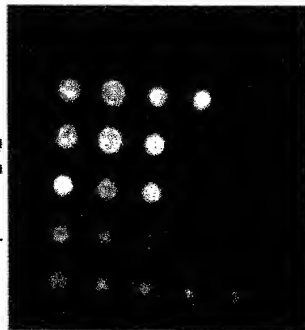


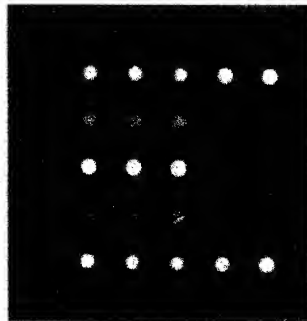
FIG. 7

[illegible]

Results (MFI/sec)

2739.7	3223.46	7303.89	4833.02	4507.12
2736.55	2432.76	3889.88	4910.55	4361.04
2410.51	1812.5	6081.99	7301.65	5521.98
2360.5	500.14	536.48	566.61	6097.33
2190.2	466.62	502.07	517.45	512.36

Reverse Dot Hybridization - ATA.5/RCA.5



Capture Load - Columns 1, 3, 5 w/500 nM ATA.5, Columns 2,4 w/500 nM ATA.4 Loading at a pulsed 400 nA per pad program; # of points listed below

	900	900	900	900
	900	900	900	900
	900	900	900	900
	900	N/A	N/A	900
	900	N/A	N/A	N/A
	900	1800	1800	1800

Target address - 400 nA pulse per pad, 0.1 sec ON, 0.2 sec OFF, 1000pts.

20nM RCA.5-BTR

Results:	223.23	152.75	259.58	165.04	207.27
	201.95	155.39	261.19	163.37	210.47
	199.1	165.99	315.9	166.12	193.91
	226.18	138.23	136.1	137.56	254.02
	261.76	137.52	137.38	147.43	254.67

Column 1 vs. Column 2
Sp/Nsp = 1.41

Column 3.5 vs. Column 4
Sp/NSp = 1.48

FIG. 8

07/08

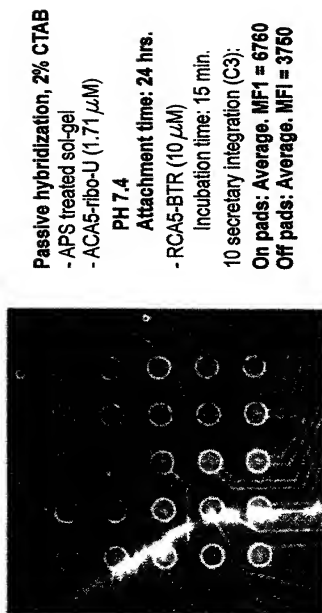


FIG. 10

FO220T" 2246200T

8/8

Passive hybridization on APS-modified sol-gel surfaces (ATA5-RCA5 duplex)

Sol-Gel coatings are derived from 2% CTAB and are approximately 250 nm thick, except for the right most chip which was over 500 nm thick and synthesized from 3% CTAB.
 All values reported are for fluorescence averaged over the 25 pads

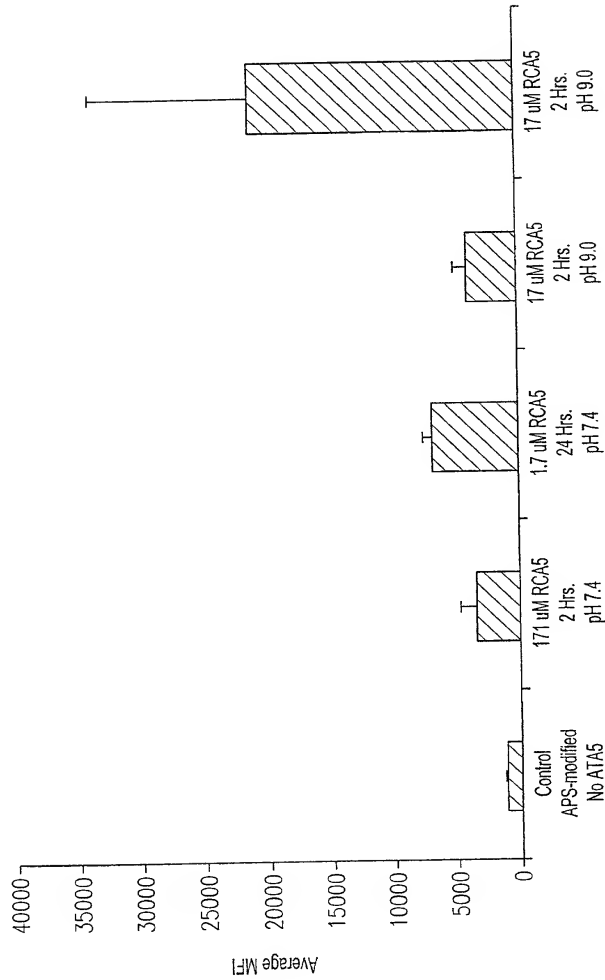


FIG. 11